

## CLAIMS

What is claimed is:

1. A method for transmitting connection data in a communications system from a server communications device, to a data access device, comprising the steps of:  
5                    sending, from the server communications device, to the data access device, a storage capability request for determining storage capability of the data access device;  
Sub A3  
10                  receiving, at the server communications device, a storage capability reply from the data access device; and  
10                  sending, based upon the storage capability reply, the connection data from the server communications device to the data access device for storage on the data access device.
2. A method for retrieving connection data in a communications system comprising the step of:  
15                  sending, from a server communications device, to a data access device, a connection data request;  
15                  receiving, at the server communications device, the connection data from the data access device; and  
20                  storing the connection data in the data access device in a non-permanent manner.
3. The method of Claim 2 wherein the connection data request comprises offset and length parameters.
4. The method of Claim 2 further comprising the step of:

determining, using the retrieved connection data, a performance characteristic of the communications system.

5. The method of Claim 2 further comprising the step of:  
5       configuring, using the retrieved connection data, a component connected to the communications system.
6. The method of Claim 5 wherein the retrieved connection data comprises a plurality of recently used Internet Protocol addresses and the step of configuring further comprises storing the Internet Protocol addresses in a router connected to the communications system.
- 10 7. The method of Claim 2 wherein the data access device supports a reduced training connection protocol and the connection data is used to reset the reduced training connection protocol.
8. The method of Claim 7 wherein the reduced training connection protocol is a Quick Connect protocol defined by ITU-T Recommendation V.92.
- 15 9. The method of Claim 2 wherein the data access device supports a reduced training connection protocol and the connection data is used to indicate that a reset of the reduced training connection protocol should be considered.
10. The method of Claim 2 wherein the connection data comprises at least one of a server communications device identifier, a data access device identifier, an Internet Service Provider identifier, a software version identifier, and a recently used Internet Protocol address.
- 20

Sub  
A3

00000000000000000000000000000000

- Sub  
AB
- 0 9 8 7 6 5 4 3 2 1
11. The method of Claim 2 wherein the data access device is an analog modem, a digital subscriber line modem, an integrated services digital network modem, a cable modem, a power line modem or a wireless modem.
- 5 12. An apparatus for transmitting connection data in a communications system from a server communications device, to a data access device, comprising:  
a first logic circuit sending a storage capability request message, for determining storage capability of the data access device, from the server communications device to the data access device;  
a second logic circuit sending a storage capability reply message from the data access device to the server communications device; and  
a third logic circuit sending a connection data buffer to the data access device from the server communications device, based upon the storage capability reply message.
- 10 13. An apparatus for retrieving connection data in a communications system comprising:  
a first logic circuit sending a connection data request message from a server communications device to a data access device, for requesting connection data;  
a second logic circuit receiving the connection data from the data access device; and  
wherein the connection data is stored in the data access device in a non-permanent manner.
- 15 20 14. The apparatus of Claim 13 wherein the connection data request message comprises offset and length parameters.
- 25 15. The apparatus of Claim 13 further comprising:

a performance attribute describing a performance characteristic of the communications system, being determined using the retrieved connection data.

16. The apparatus of Claim 13 further comprising:

5 a component, connected to the communications system, configured using the retrieved connection data.

17. The apparatus of Claim 16 wherein the retrieved connection data comprises a plurality of recently used Internet Protocol addresses and

the component is configured by storing the Internet Protocol addresses in a router connected to the communications system.

- 10 18. The apparatus of Claim 13 wherein the data access device supports a reduced training connection protocol and the connection data is used to reset the reduced training connection protocol.

19. The apparatus of Claim 18 wherein the reduced training connection protocol is a Quick Connect protocol defined by ITU-T Recommendation V.92.

- 15 20. The apparatus of Claim 13 wherein the data access device supports a reduced training connection protocol and the connection data is used to indicate that a reset of the reduced training connection protocol should be considered.

21. The apparatus of Claim 13 wherein the connection data comprises at least one of a server communications device identifier, a data access device identifier, an  
20 Internet Service Provider identifier, a software version identifier, and a recently used Internet Protocol address.

Sub  
P3

00000000000000000000000000000000

22. The apparatus of Claim 13 wherein the data access device is an analog modem, a digital subscriber line modem, an integrated services digital network modem, a cable modem, a power line modem or a wireless modem.

23. An apparatus for transmitting connection data in a communications system from a server communications device, to a data access device, comprising:  
5            a first means for sending, from the server communications device, to the data access device, a storage capability request message for determining storage capability of the data access device;  
10            a means for receiving, at the server communications device, a storage capability reply message from the data access device; and  
15            a second means for sending, based upon the storage capability reply message, the connection data from the server communications device to data access device for storage on the data access device.

24. An apparatus for retrieving connection data in a communications system comprising:  
15            a means for sending, from a server communications device, to a data access device, a connection data request message;  
20            a means for receiving, at the server communications device, the connection data from the data access device; and  
25            wherein the connection data is stored in the data access device in a non-permanent manner.

25. A computer program product comprising:  
a computer usable medium storing a set of computer instructions for:  
sending, from the server communications device, to the data access device, a  
storage capability request for determining storage capability of the data  
access device;

receiving, at the server communications device, a storage capability reply from the data access device; and

sending, based upon the storage capability reply, the connection data from the server communications device to data access device for storage on the data access device.

5

26. A computer program product comprising:

a computer usable medium storing a set of computer instructions for:

sending, from a server communications device, to a data access device, a connection data request;

receiving, at the server communications device, the connection data from the data access device; and

wherein the connection data is stored in the data access device in a non-permanent manner.

27. A computer data signal embodied in a carrier wave comprising a code segment for:

sending, from the server communications device, to the data access device, a storage capability request for determining storage capability of the data access device;

receiving, at the server communications device, a storage capability reply from the data access device; and

sending, based upon the storage capability reply, the connection data from the server communications device to data access device for storage on the data access device.

28. A computer data signal embodied in a carrier wave comprising a code segment for:

sending, from a server communications device, to a data access device, a connection data request;

Sub  
A3

卷之三

receiving, at the server communications device, the connection data from the data access device; and

wherein the connection data is stored in the data access device in a non-permanent manner.

JW  
A3

09623644-0234060